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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/602,776      | 06/25/2003  | Takashi Suzuki       | H64-154710M/MNN     | 2236             |
| 21254           | 7590        | 04/07/2005           |                     | EXAMINER         |
|                 |             |                      |                     | GHATT, DAVE A    |
|                 |             |                      | ART UNIT            | PAPER NUMBER     |
|                 |             |                      |                     | 2854             |

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/602,776             | SUZUKI ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Dave A. Ghatt          | 2854                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 January 2005.
- 2a) This action is **FINAL**.                                   2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14, 16-20, 22 and 24-26 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 22 is/are allowed.
- 6) Claim(s) 1-12, 14, 16-20, 24 and 26 is/are rejected.
- 7) Claim(s) 13 and 25 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 June 2003 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/15/04.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, 7, 8, 14, 16, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manzer et al. (US 6,256,463) in view of Smith et al. (US 6,374,066). With respect to claim 1, as illustrated in Figure 5, Manzer et al. teaches, an image forming apparatus comprising, a first image forming unit 11 comprising a first printing section (not numbered) for forming a first image on a paper. As illustrated in Figures 2 and 12, and as outlined in column 11 lines 34-38, Manzer et al. also teaches a second image forming unit 10 comprising a second printing section (22, D1) for forming a second image on the paper. Figure 2 illustrates a paper-conveying unit 16 (and Figure 12 a paper conveying unit 49) for conveying the paper from the first image-forming unit 11 to the second image-forming unit 10. (See also column 7 lines 55-65.) In fact, Manzer et al. teaches all the claimed subject matter, except for the specific teaching that the second image forming unit 10 comprises a second paper supply section for storing paper and supplying paper stored in the second paper supply section to the second printing section. Smith et al. teaches an image forming apparatus including an image forming unit similar to that taught by Manzer et al. Figure 3 of Smith et al. shows the imaging forming unit 11, having a paper supply section 5 and a printing section shown generally at 3. As shown in Figure 3,

Manzer et al. teaches the supply section (movable drawer 5) for storing paper and for supplying paper to printing section. To one of ordinary skill in the art, it would have been obvious to include the paper storage and supply section as taught by Smith et al., in the second image forming unit of Manzer et al. in order to enable a user to refill paper or other supplies therein, as taught by Smith et al. in column 3 lines 4-8.

With respect to claims 3 and 8, as outlined in column 7 lines 55-65 of the primary reference Manzer et al., the second image forming unit 10 with a printing section utilizing one recording material (monochromatic) and the first image forming unit 11 with a printing section utilizing a different recording material (color).

With respect to claims 4 and 8, as outlined in column 7 lines 23-39 of the primary reference Manzer et al., the printers are electrographic printers, all of which use some type of toner.

With respect to claim 7, as outlined in column 7 lines 55-65 of the primary reference Manzer et al., the apparatus uses color in the first image forming unit 11.

With respect to claim 14, as illustrated in Figure 12 of the primary reference Manzer et al., the paper conveying unit 49 includes a first conveyance passage (44, 47) for passing the paper from the first image forming unit 11 to the second image forming unit 10, and a second conveyance passage 48 connected to the first conveyance passage, for transmitting the paper to the outside. See column 12 lines 19-25 teaching the use of passage 48 for directing paper to the outside.

With respect to claim 16, Figures 2 and 12 of the primary reference Manzer et al. teach the first image forming unit 11 and the second image-forming unit 10, detachable from the paper conveying unit (16, 49).

With respect to claim 17, the primary reference Manzer et al. teaches the first image forming unit 11 and the second image forming unit 10 capable of forming an image on the paper and outputting the paper independently.

With respect to claim 18, insofar as structure is outlined, the primary reference Manzer et al. teaches the claimed invention. In view of the modular structure illustrated in Figure 1, the first printing unit 11 (and therefore the first printing section) and the second printing unit 10 (and therefore the second printing section) are exchangeable.

With respect to claim 20, column 13 lines 5-25 of Manzer et al. teach the second image forming unit 10 comprising a second reversing section (W4, W2) for reversing the paper on which the second image is formed, and for delivering the paper to the second printing section D1.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manzer et al. (US 6,256,463) in view of Smith et al. (US 6,374,066), as applied to claim 1 above, and further in view of Horie et al. (US 5,208,640). As outlined in the above rejection to claim 1, Manzer et al. and Smith et al. teach all the claimed structure, except for the first and second printing units using the same recording material. Horie et al. teaches a printing device similar to that of Manzer et al. and Smith et al. As illustrated in Figure 3, Horie et al. teaches, an image forming apparatus comprising, a first image forming unit 30c having a first printing section LM for

forming a first image on a paper. As illustrated in Figure 3 Horie et al. also teaches a second image forming unit 30b having a second printing section MM for forming a second image on the paper. The first and second printing units of Horie et al. use the same recording material. To one of ordinary skill in the art, it would have been obvious to use printing units with the same recording material, as taught by Horie et al., in the invention of Manzer et al. and Smith et al., in order to provide similar prints simultaneously, as taught in the abstract Horie et al.

4. Claims 5, 6, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manzer et al. (US 6,256,463) in view of Smith et al. (US 6,374,066), as applied to claim 1 above, and further in view of Nonomura et al. (US 6,389,253). As outlined in the above rejection to claim 1, Manzer et al. teaches all the claimed structure, except Manzer et al. and Smith et al. is silent on whether the toner used is ferromagnetic, non-magnetic toner, or both. Nonomura et al. teaches a printer similar to that of Manzer et al. and Smith et al. As outlined in column 14 lines 17-20, the apparatus of Nonomura et al. may use magnetic and non-magnetic toner. To one of ordinary skill in the art, in the invention of Manzer et al. and Smith et al., it would have been obvious to use magnetic toner, non-magnetic toner, or a combination thereof, as a simple substitution of one known toner for another, because both types of toner are known to produce similar effect and action, as taught by Nonomura et al. in column 14 lines 17-20.

5. Claims 9, 10, 11, 12, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manzer et al. (US 6,256,463) in view of Smith et al. (US 6,374,066), as applied to claims 1 and 20 above, and further in view of Katou et al. (US 6,331,004). As

outlined in the above rejection to claim 1, Manzer et al. and Smith et al. teach all the claimed structure, except for the specific teaching of a reversing unit in the first image-forming unit, for reversing the paper on which the image is formed. With respect to claims 9, 24 and 26, Katou et al. teaches a printing unit 1 similar to the first image-forming unit of Manzer et al. and Smith et al. As outlined in the abstract, the printing unit of Katou et al. includes a reversing section for reversing paper on which an image is formed to deliver to the printing section. To one of ordinary skill in the art, it would have been obvious to include a paper reversing section as taught by Katou et al., in the first image forming unit of Manzer et al. and Smith et al, in order to facilitate printing on both sides and to avoid increase in the size of the device, as outlined in the abstract of Katou et al. Furthermore, the inclusion of a paper reversing section for dual side printing is also rendered obvious by the column 2 lines 11-17 teaching of Manzer et al., which outlines double sided color printing.

With respect to claims 10 and 12, as outlined above, column 2 lines 11-17 of Manzer et al. teaches two-sided images (i.e., forming a third image) being formed in the first image forming unit. Column 13 line 21 teaches the second image forming unit 10 forming dual sided images, including a fourth image on the paper delivered from the second reversing section (W4, W2). Also stated above, Manzer et al. and Smith et al. does not specifically teach an image reversing section. Katou et al. includes a reversing section for reversing paper on which an image is formed. To one of ordinary skill in the art, it would have been obvious to include a paper reversing section as taught by Katou et al., in the first image forming unit of Manzer et al. and Smith et al., in order to facilitate printing on both sides and to avoid increase in the size of the device, as outlined in the abstract of Katou et al. Furthermore, the inclusion of a paper reversing

section for dual side printing is also rendered obvious by the column 2 lines 11-17 teaching of Manzer et al., which outlines double sided color printing.

With respect to claim 11, column 13 lines 5-25 of Manzer et al. teach the second image forming unit 10 comprising a second reversing section (W4, W2) for reversing the paper on which the second image is formed, and for delivering the paper to the second printing section D1.

***Allowable Subject Matter***

6. Claims 13 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 13 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including a first conveyance passage for transmitting the paper delivered from the paper conveying unit via the second printing section to the outside, and a second passage transmitting the paper to the outside while bypassing the second print section.

7. Claim 22 is allowed.

***Response to Amendment***

8. Applicant's amendment and arguments, filed January 18, 2005, have been fully considered. In view of the amendment to claim 1, a new ground(s) of rejection is made under

Manzer et al. (US 6,256,463) in view of Smith et al. (US 6,374,066). Claims dependent on claim 1 were also rejected based on the above cited reference. As stated in the rejection statement, the examiner believes that Smith et al. teaches the obviousness of a paper storage and supply section in the second image forming unit of Manzer et al.

In view of the amendments to claim 11, the double patenting rejection under 37 CFR 1.75 has been withdrawn.

In view of the amendment to claim 12, the rejection under 35 U.S.C., second paragraph has been withdrawn.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave A. Ghatt whose telephone number is (571) 272-2165. The examiner can normally be reached on Mondays through Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAG



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